

- PI 590013. *Malus ioensis* (Alph. Wood) Britton
Collected 09/13/1988 in Iowa, United States. Iowa, Monono Co., Whiting Woods, Monono Co. Conservation Board, west roadside, Asian Crab nearby, 0.5 mi. N. from Timber Ridge Ranch entrance. Pedigree - Wild.
Comments:: 25 ft. high, 9 inch diam. Double flowered type.
- PI 590014. *Malus coronaria* (L.) Miller
Collected 09/14/1988 in Nebraska, United States. Nebraska, Richardson Co., N.E. of Barada, W. bank of the Missouri River; steep slope, wooded, edge of forest. Pedigree - Wild. Comments:: 10 ft. high; 1 1/2 inch diam., no fruit, scion; 10+ fruitless.
- PI 590015. *Malus ioensis* (Alph. Wood) Britton
Collected 09/15/1988 in Missouri, United States. Missouri, Buchanan Co., Missouri Western State College campus, Biology study area. 100+ individuals scattered throughout secondary woods, Gleditsia, Alnus, rubra. Pedigree - Wild. Comments:: 12 ft. high, 5 inch diam., fruit and scion.
- PI 590016. *Malus ioensis* (Alph. Wood) Britton
Collected 09/16/1988 in Missouri, United States. Missouri, Randolph Co., Claude Shores Memorial Roadside Rest just N. of Hwy 22 on Hwy 63, E. roadside. Fence row with 20+ trees. Pedigree - Wild. Comments:: 7 ft. high, 1 1/1 inch diam.
- PI 590017. *Malus ioensis* (Alph. Wood) Britton
Collected 09/16/1988 in Missouri, United States. Missouri, Randolph Co., Claude Shores Memorial Roadside Rest just N. of Hwy 22 on Hwy 63, E. roadside. Fence row with 20+ trees. Pedigree - Wild. Comments:: 15 ft. high, 3 inch diam.
- PI 590018. *Malus coronaria* (L.) Miller
Collected 09/18/1988 in Illinois, United States. Illinois, Pope Co., 8.7 mi. W. of Hwy 45 on Mossac Co. 400 N., 1.4 mi. W. of Smithland Locks and Dam Ohio River turn- off, at edge of forest beyond recent clearing. Pedigree - Wild. Comments:: 5 ft. high, fruitless, scion, felled coronaria with many new upright shoots.
- PI 590019. *Malus coronaria* (L.) Miller
Collected 09/18/1988 in Illinois, United States. Illinois, Pope Co., 8.7 mi. W. of Hwy 45 on Mossac Co. 400 N., 1.4 mi. W. of Smithland Locks and Dam Ohio River turn- off. At edge of forest, beyond recent clearing. Pedigree - Wild. Comments:: 30 ft. high, 7 inch diam. fruit, scion. Felled coronaria with many new upright shoots.
- PI 590020. *Malus coronaria* (L.) Miller
Collected 09/19/1988 in Kentucky, United States. Kentucky, Montgomery Co., on Hwy 213 E. roadside, 0.8 mi. S. from Spruce First Church of God. 4.9 mi. S. of Hwy 460 junction at Jeffersonville. Population of 20+ at creek bed. Pedigree - Wild. Comments:: 20 ft. high, 6 inch diam.
- PI 590021. *Malus coronaria* (L.) Miller
Collected 09/19/1988 in Kentucky, United States. Kentucky, Rowan Co., 7.8 mi. N. from junction with Hwy 799 on Hwy 377 E. roadside, W. of creek, 6+ trees. Pedigree - Wild. Comments:: 15 ft. high, 3 inch diam., scion.

The following were developed by Stark Brothers Nurseries, Louisiana, Missouri 63353, United States. Donated by Charles Putensen, 1906 350th Street, Spencer, Iowa 51301-7456, United States. Received 01/09/1989.

- PI 590022. *Malus domestica* Borkh.
Oliver or Senator. Pedigree - Propagated since about 1873 in